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25943 7590 09/10/2007 SCHWABE, WILLIAMSON & WYATT, P.C. PACWEST CENTER, SUITE 1900 1211 SW FIFTH AVENUE PORTLAND, OR 97204			EXAMINER RUTTEN, JAMES D	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/082,794

Applicant(s)

BAU ET AL.

Examiner

J. Derek Rutten

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-10,12-18,20-22,31-33,35-40 and 42-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-10,12-18,20-22,31-33,35-40 and 42-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. This action is in response to Applicant's submission filed 6/18/07, responding to the 4/30/07 Office action which detailed the rejection of claims 1-10, 12-18, 20-22, 31-40, and 42-44. Claims 1, 3, 16, 17, 31, 38, and 39 have been amended, claims 2, 4, 11, 19, 23-30, 34, 41, and 45-52. Claims 1, 3, 5-10, 12-18, 20-22, 31-33, 35-40, and 42-44 remain pending in the application and have been fully considered by the examiner.

Response to Arguments/Amendments

2. On page 11, Applicant does not argue in regard to the Double Patenting rejections, but has agreed to submit the necessary Terminal Disclaimers upon issuance of 10/082,807, 10/784,492, or the instant application. As such, the rejection over 10/784,492 is maintained. It is noted that a restriction requirement was filed in 10/082,807, and election was made without traverse of group II, claims 12-19, and 54-61 (see 8/10/07 filing). All other claims have been withdrawn from consideration, or cancelled. The previous double patenting rejection was made using numerous claims that are currently withdrawn from consideration. Therefore, in accordance with 37 CFR 1.142(b), the double patenting rejection over 10/082,807 has been withdrawn, subject to reinstatement in the event the requirement for restriction is withdrawn or overruled.

3. Applicant's arguments, see pages 13-14, filed 6/18/07, with respect to the rejection of claims 1, 4, 10, 38, 39, and 44 under 35 U.S.C. 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, new grounds of rejection are made in view of U.S. PG-Pub 2003/0014733 A1 by Ringseth et al.

4. Further arguments on pages 15-19, filed 6/18/07, are based on arguments as addressed above, and are equally persuasive for the same reasons.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. The text of the provisional rejections under the judicially created doctrine of obviousness-type double patenting, as found in the previous Office Action, is reproduced below for convenience.

7. Claims 1, 3, 5-10, 12-18, 20-22, 31-33, 35-40, and 42-44 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1-8, 19-23, 26, 27, 31-36, 38, 39, 43, and 44 of copending Application No. 10/784,492 (hereinafter "the '492 application"). Although the conflicting claims are not identical, they are not patentably distinct from each other because, for example, the '492 application discloses:

1. A method of specifying a stateful web service within a procedural programming environment (see page 39 lines 4-12), the method comprising:

first facilitating, by an integrated development environment of a computing device, a user in providing a source code representation of at least a portion of web service logic, the logic including one or more methods; See claim 1 on page 36 lines 2-4:

an annotated source code, which is a programming language augmented with declarative meta-data capable of exposing program logic as a network-accessible service

Also see claim 5, e.g. “integrated development environment.”

second facilitating, by the integrated development environment of the computing device, the user in identifying one of said one or more methods to be exposed as part of the stateful web service; See claim 1 on page 36 lines 5-6:

at least one deployed service component capable of providing the network-accessible service to a client

Further, see claim 8 on page 37 lines 5-6:

the annotated source code is capable of facilitating access to an external service, which can be one of stateful, stateless, synchronous, and asynchronous.

in response to user input, automatically specifying, by the integrated development environment of the computing device, one or more declarative annotations within the source code representation, the declarative annotations, when recognized by a compiler through analysis of the web service logic which includes the declarative annotations, causing the compiler to generate one or more persistent components to maintain conversational state related to the identified method. See claim 1 on page 36 lines 2-3:

an annotated source code, which is a programming language **augmented with declarative meta-data.** [emphasis added]

Further, see page 36 lines 7-10:

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an enhanced compiler capable of analyzing the **annotated source code**, recognizing numerous types of **meta-data annotations**, and generating a mechanism, which can include one or more of: object files, software components and deployment descriptors, to facilitate the deployment of the at least one service **component** [emphasis added]

Further, see page 36 lines 14-16:

the system is capable of simultaneously managing multiple transactions, wherein each transaction can be a **conversation** of a request and/or a response from the client for the network-accessible service. [emphasis added]

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1, 3, 5-10, and 12-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. Claim 1 recites the limitation "the web service logic which includes the declarative annotations" in lines 11-12. There is insufficient antecedent basis for this limitation in the claim. For the purpose of further examination, this limitation is interpreted as --the source code representation which includes the declarative annotations--. Claims 3, 5-10, and 12-15 are rejected as being dependent upon a rejected base claim.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1, 10, 16, 22, 31, 38 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over prior art of record “Using WebLogic Enterprise JavaBeans” by BEA Systems (hereinafter “WebLogic”) in view of U.S. PG-Pub. 2003/0014733 by Ringseth et al. (hereinafter “Ringseth”).

In regard to claim 1, WebLogic discloses:

A method of specifying a stateful web service within a procedural programming environment, (See page 5 steps 1-3) the method comprising:

first facilitating, by an integrated development environment of a computing device, a user in providing a source code representation of at least a portion of web service logic, the logic including one or more methods; See section III on page 4:

There are three parts to using WebLogic EJB:

1. Develop an EJB or obtain one from a third-party supplier.

Also see page 3 paragraph 5 for disclosure of methods in an EJB:

...an EJB contains the business logic (**methods**)...

Further, WebLogic discloses “a framework for the development and deployment of EJBs” by a user/developer (see Applicants’ comments at the bottom of page 12, filed 4/19/07), and is interpreted as providing an integrated development environment.

second facilitating, by the integrated development environment of the computing device, the user in identifying one of said one or more methods to be exposed as part of the stateful web service; See page 2:

Session beans (either **stateful** or stateless) [emphasis added]

Also see page 3, 4th paragraph:

With the EJB model, you can write or buy business components (such as invoices, bank accounts and shipping routes) and, during **deployment** into a certain project, specify how the component should be used -- which users have **access to which methods**, whether the framework should automatically start a transaction or whether it should inherit the caller's transaction, and so on.
[emphasis added]

Also page 6 “Step 2” discloses identification of methods to be exposed:

Check the deployment descriptor and modify any of its properties for your particular deployment (if required).

in response to user input, automatically specifying, by the integrated development environment of the computing device, one or more declarative annotations within the source code representation, the declarative annotations, when recognized by a compiler through analysis of the <source code representation> which includes the declarative annotations, causing the compiler to generate one or more persistent components to maintain conversational state related to the identified method. See page 5 “Step 2”:

The **Deployment Descriptor** ties together the different classes and interfaces, and is used to build the code-generated class files. It also allows you to specify some aspects of the EJB's deployment at runtime.

...WebLogic EJB includes a utility application DDCreator that **takes a text file specification and creates the appropriate serialized deployment descriptor.**
[emphasis added]

Also see page 6 along with “Step 3”:

Generate the wrapper classes using the WebLogic EJB compiler (ejbc)...

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This will **create the appropriate files** for the bean...
[emphasis added]

Also, page 8 discloses the general capabilities of EJBs with respect to persistence and transactional, or “conversational”, state:

An entity EJB can save its state in any **transactional** or non-transactional **persistent** storage...
[emphasis added]

WebLogic does not expressly disclose “*one or more declarative annotations within the source code representation.*” However, Ringseth teaches the use of declarative annotations in source code to specify web services. See paragraph [0032]:

In connection with the operation of an attribute provider in accordance with the invention, a compiler operates to implement SOAP-based Web services written according to the **declarative syntax** of the present invention. [emphasis added]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Ringseth’s declarative annotations with WebLogic’s source code so that “a Web service developer may implement SOAP-based Web services without being required to understand the underlying details regarding the SOAP protocol, dispatching to the appropriate object and function, marshaling the XML, un-marshaling the XML, and generating the SOAP response” (see Ringseth paragraph [0032]).

In regard to claim 10, the above rejection of claim 1 is incorporated. WebLogic further discloses: *wherein the one or more declarative annotations are manually specified by a developer.* See page 6 “Step 2”.

In regard to claim 16, WebLogic discloses:

In a procedural programming environment, a method of generating a stateful web service (See pages 6 and 7), the method comprising:

reading on one or more computing devices a segment of procedural source code representing at least a portion of the web service; parsing on one or more computing devices the <segment of source code> to identify the presence of one or more declarative annotations identifying an associated method within the segment as being stateful; generating on one or more computing devices one or more object codes defining one or more publicly accessible service components based at least in part upon the source code;

See page 6 “Step 3”:

Generate the wrapper classes using the WebLogic EJB compiler (ejbc) with this command (typed on one line), **referencing the serialized deployment descriptor**:

\$ java weblogic.ejbc -d /weblogic/myserver/temp AccountBeanDD.ser

...

This will create the appropriate files for the bean, and place them in a temporary directory

Reading and parsing source code is an inherent feature of a compiler, as object code could not be generated without both steps. This passage also shows use of a computing device by the invocation of a command that is “typed on one line”.

generating on one or more computing devices meta-data based at least in part upon the one or more declarative annotations; associating on one or more computing devices meta-data with the one or more object codes; and See page 5 “Step 2”:

The Deployment Descriptor **ties together** the different classes and interfaces, and is **used to build** the code-generated class files.

if the presence of the one or more declarative annotations are identified by the parsing, generating, in response, on one or more computing devices one or more

persistent components to maintain conversational state relating the associated method.

See page 5 “Step 2”:

The **Deployment Descriptor** ties together the different classes and interfaces, and **is used to build the code-generated class files**. It also allows you to specify some aspects of the EJB's deployment at runtime.

... WebLogic EJB includes a utility application DDCreator that **takes a text file specification and creates the appropriate serialized deployment descriptor**.
[emphasis added]

Also see page 6 along with “Step 3”:

Generate the wrapper classes using the WebLogic EJB compiler (ejbc)...
This will **create the appropriate files** for the bean...
[emphasis added]

Page 8 discloses the general capabilities of EJBs with respect to persistence and transactional, or “conversational”, state:

An entity EJB can save its state in any **transactional** or non-transactional **persistent** storage...
[emphasis added]

WebLogic does not expressly disclose a segment of source code containing declarative annotations. However, Ringseth teaches the use of declarative annotations in source code to specify web services. See paragraph [0032]:

In connection with the operation of an attribute provider in accordance with the invention, a compiler operates to implement SOAP-based Web services written according to the **declarative syntax** of the present invention. [emphasis added]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Ringseth's declarative annotations with WebLogic's source code so that “a Web service developer may implement SOAP-based Web services without being required to understand the underlying details regarding the SOAP protocol, dispatching to the appropriate object and function, marshaling the XML, un-marshaling the XML, and generating the SOAP response” (see Ringseth paragraph [0032]).

In regard to claim 22, the above rejection of claim 16 is incorporated. WebLogic further discloses: *wherein the source code is written in the Java programming language.* WebLogic discloses implementation using Enterprise JavaBeans (EJB - See page 2) which is an API that uses the Java programming language.

In regard to claim 31, WebLogic discloses:

a storage medium; and a plurality of programming instructions stored on the storage medium (page 7 step 5 shows a directory path for storage of programming instructions), *to provide an integrated development environment to facilitate a user in providing input associated with web service logic of a stateful web service...* WebLogic discloses “a framework for the development and deployment of EJBs” by a user/developer (see Applicants’ comments at the bottom of page 12, filed 4/19/07), and is interpreted as providing an integrated development environment.

and automatically specify, in response to the user input, one or more declarative annotations ..., the declarative annotations associated with an identified method of the web service logic page 2:

Session beans (either **stateful** or stateless) [emphasis added]

Also page 6 “Step 2” discloses identification of methods to be exposed:

Check the deployment descriptor and modify any of its properties for your particular deployment (if required).

the declarative annotations, when recognized by a compiler through analysis of the web service logic, causing the compiler to generate one or more persistent

components to maintain conversational state related to the identified method. See page 5

“Step 2”:

The **Deployment Descriptor** ties together the different classes and interfaces, and **is used to build the code-generated class files**. It also allows you to specify some aspects of the EJBBean's **deployment** at runtime.

... WebLogic EJB includes a utility application DDCreator that **takes a text file specification and creates the appropriate serialized deployment descriptor**.
[emphasis added]

Also see page 6 along with “Step 3”:

Generate the wrapper classes using the WebLogic EJB **compiler** (ejbc)...
This will **create the appropriate files** for the bean...
[emphasis added]

WebLogic does not expressly disclose “*declarative annotations within the web service logic.*” However, Ringseth teaches the use of declarative annotations in source code to specify web services. See paragraph [0032]:

In connection with the operation of an attribute provider in accordance with the invention, a compiler operates to implement SOAP-based Web services written according to the **declarative syntax** of the present invention. [emphasis added]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Ringseth's declarative annotations with WebLogic's source code so that “a Web service developer may implement SOAP-based Web services without being required to understand the underlying details regarding the SOAP protocol, dispatching to the appropriate object and function, marshaling the XML, un-marshaling the XML, and generating the SOAP response” (see Ringseth paragraph [0032]).

In regard to claim 38, WebLogic discloses:

An article of manufacture comprising: a storage medium having stored therein a plurality of programming instructions. Page 7 step 5 shows a directory path for storage

of programming instructions as cited in the rejection of claim 31. All further limitations were addressed in the above rejection of claim 16.

In regard to claim 44, the above rejection of claim 38 is incorporated. All further limitations have been addressed in the above rejection of claim 22.

13. Claims 3 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over prior art of record WebLogic and Ringseth as applied to claim 1 above, and further in view of prior art of record “EJBDoclet”, December 21 2000, by dreamBean Software (hereinafter “dreamBean”).

In regard to claim 3, the above rejection of claim 1 is incorporated. WebLogic does not expressly disclose declarative annotations within a comment field preceding an identified method. However, in an analogous environment, dreamBean teaches a tool for generating “EJB files from a commented bean source-file” (page 1 paragraph 1). dreamBean further teaches using comment fields preceding a method to support generation of externally accessible methods. See middle of page 5, where the annotation “@remote-method” appears in a comment preceding the identified methods “deposit” and “withdraw”. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use dreamBean’s declarative annotation with WebLogic’s source code. One of ordinary skill would have been motivated to automatically generate a remote interface (see dreamBean page 1 under “Features”).

In regard to claim 33, the above rejection of claim 32 is incorporated. All further limitations have been addressed in the above rejection of claim 3.

14. Claims 5-8, 18 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over WebLogic and Ringseth as applied to claim 1 above, and further in view of “Enterprise JavaBeans” by Monson-Haefel (hereinafter “Monson-Haefel”).

In regard to claim 5, the above rejection of claim 1 is incorporated. WebLogic further discloses use of the “ejbCreate” function. See page 24, 4th paragraph. WebLogic and Ringseth do not expressly disclose specifics of the start, continue or finish methods. However, in an analogous environment, Monson-Haefel teaches that “deployment descriptors” could be used as declarative annotations that indicate: *wherein the start method applies to the start of a stateful conversation between a client and the web service* (see section 7.4.2.1), *the continue method applies to the continuation of an ongoing stateful conversation between a client and the web service* (see section 7.4.2 “ejbActivate()” on page 4 of section 7.4), *and the finish method applies to the completion of an ongoing stateful conversation between a client and the web service* (see section 7.4.2.3). Monson-Haefel further teaches that such methods can be entered as annotations in section 10.6.3.2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Monson-Haefel’s teaching of stateful sessions with BAE Websphere’s components. One of ordinary skill would have been motivated to

provide a dedicated stateful session bean to act on behalf of a client for its entire life cycle (see section 7.3 paragraph 1).

In regard to claim 6, the above rejection of claim 5 is incorporated. WebLogic and Ringseth do not expressly disclose: *wherein when a method declared to be a start method is invoked at run-time, a new instance of a conversation is created, and a unique identifier is associated with that conversational instance to facilitate management of multiple simultaneous conversations*. However, Monson-Haefel teaches instantiation of a conversation and return of an identifier upon invocation of a start method. See Section 7.4.2.1.

In regard to claim 7, the above rejection of claim 5 is incorporated. WebLogic and Ringseth do not expressly disclose: *wherein when a method declared to be a continue method or a finish method is invoked at run-time, a unique identifier provided by the client is obtained and used to access a corresponding instance of a conversation*. However, Monson-Haefel teaches the return of an identifier as noted in the above rejection of claim 6. Use of the representative identifier is inherent in referencing the session as discussed in section 7.4.2.3.

In regard to claim 8, the above rejection of claim 7 is incorporated. WebLogic and Ringseth do not expressly disclose: *wherein when a finish method is invoked at run-time, the corresponding instance of the conversation is destroyed after processing by the*

web service logic. However, Monson-Haefel teaches that the instance is destroyed after processing. See section 7.4.2.3.

In regard to claim 18, the above rejection of claim 16 is incorporated. All further limitations have been addressed in the above rejection of claim 5.

In regard to claim 40, the above rejection of claim 38 is incorporated. All further limitations have been addressed in the above rejection of claim 18.

15. Claim 9, 17, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over WebLogic and Ringseth as applied to claim 1 above, and further in view of prior art of record U.S. Patent 5,812,768 to Pagé et al. (hereinafter “Page”).

In regard to claim 9, the above rejection of claim 1 is incorporated. WebLogic and Ringseth do not expressly disclose: *wherein the one or more declarative annotations indicate to the compiler whether the identified method is buffered, wherein if the identified method is buffered the compiler instantiates one or more queues to temporarily store one or more requests for the identified method*. However, in an analogous environment, Page teaches that interaction with web services can be implemented as buffered messages that operate asynchronously via message queues. See column 6 lines 39-46. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Page’s queues with WebLogic’s methods. One of ordinary

skill would have been motivated to implement “store and forward” technology in order to provide reliable data delivery as suggested by Page (see column 2 lines 30-34).

In regard to claim 17, the above rejection of claim 16 is incorporated. All further limitations have been addressed in the above rejection of claim 9.

In regard to claim 39, the above rejection of claim 38 is incorporated. All further limitations have been addressed in the above rejection of claim 9.

16. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over WebLogic and Ringseth as applied to claim 1 above, and further in view of U.S. Patent 6,230,160 to Chan et al. (hereinafter “Chan”).

In regard to claim 12, the above rejection of claim 1 is incorporated. WebLogic and Ringseth do not expressly disclose: *wherein said input includes graphical manipulation of the identified method by the developer via the integrated development environment*. However, in an analogous environment, Chan teaches an IDE for manipulation of program elements and methods. See FIG. 4A and column 8 lines 19-30.

17. Claims 13, 20, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over WebLogic and Ringseth as applied to claim 1 above, and further in view of the “Background of the Invention” section appearing on pages 1-3 of the originally filed specification (hereinafter “BOTI”).

In regard to claim 13, the above rejection of claim 1 is incorporated. WebLogic and Ringseth do not expressly disclose: *a proxy object designed to facilitate interaction by the web service with one of an external web service or client*. However, BOTI teaches implementation of proxy objects. See page 2 lines 17-19. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use BOTI's teaching of implementation of a proxy object with WebLogic's web service. One of ordinary skill would have been motivated to automatically generate a required proxy mechanism.

In regard to claim 20, the above rejection of claim 16 is incorporated. All further limitations have been addressed in the above rejection of claim 13.

In regard to claim 42, the above rejection of claim 38 is incorporated. All further limitations have been addressed in the above rejection of claim 20.

18. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over WebLogic, Ringseth and BOTI as applied to claim 13 above, and further in view of Page.

In regard to claim 14, the above rejection of claim 13 is incorporated. All further limitations have been addressed in the above rejection of claim 9.

19. Claims 15, 21, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over WebLogic, Ringseth and BOTI as applied to claims 13, 20, and 42 above, and further in view of Monson-Haefel.

In regard to claims 15 and 21, the above rejection of claims 13 and 20 are respectively incorporated. All further limitations have been addressed in the above rejection of claim 6.

In regard to claim 43, the above rejection of claim 42 is incorporated. All further limitations have been addressed in the above rejection of claim 21.

20. Claims 32 and 33 rejected under 35 U.S.C. 103(a) as being unpatentable over WebLogic and Ringseth as applied to claim 31 above, and further in view of Chan.

In regard to claim 32, the above rejection of claim 31 is incorporated. All further limitations have been addressed in the above rejection of claim 1 and 12.

21. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over WebLogic and Ringseth as applied to claim 31 above, and further in view of BOTI.

In regard to claim 35, the above rejection of claim 31 is incorporated. All further limitations have been addressed in the above rejection of claim 13.

22. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over WebLogic, Ringseth, and BOTI as applied to claim 35 above, and further in view of Page.

In regard to claim 36, the above rejection of claim 35 is incorporated. All further limitations have been addressed in the above rejection of claim 14.

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23. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over WebLogic, Ringseth, and BOTI as applied to claim 35 above, and further in view of Monson-Haefel.

In regard to claim 37, the above rejection of claim 35 is incorporated. All further limitations have been addressed in the above rejection of claim 15.

Conclusion

24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. PG-Pub 2005/0021594 A1 by Bernardin et al. discloses a computing environment that provides proxy objects associated with asynchronous interfaces for communication with clients. See paragraph [0019]. This appears to be similar to the subject matter of claims 35-37.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Derek Rutten whose telephone number is (571)272-3703. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571)272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. Derek Rutten/
Patent Examiner, AU 2192